

# **AW Transmission Engineering, USA**

## **Plymouth, Michigan**



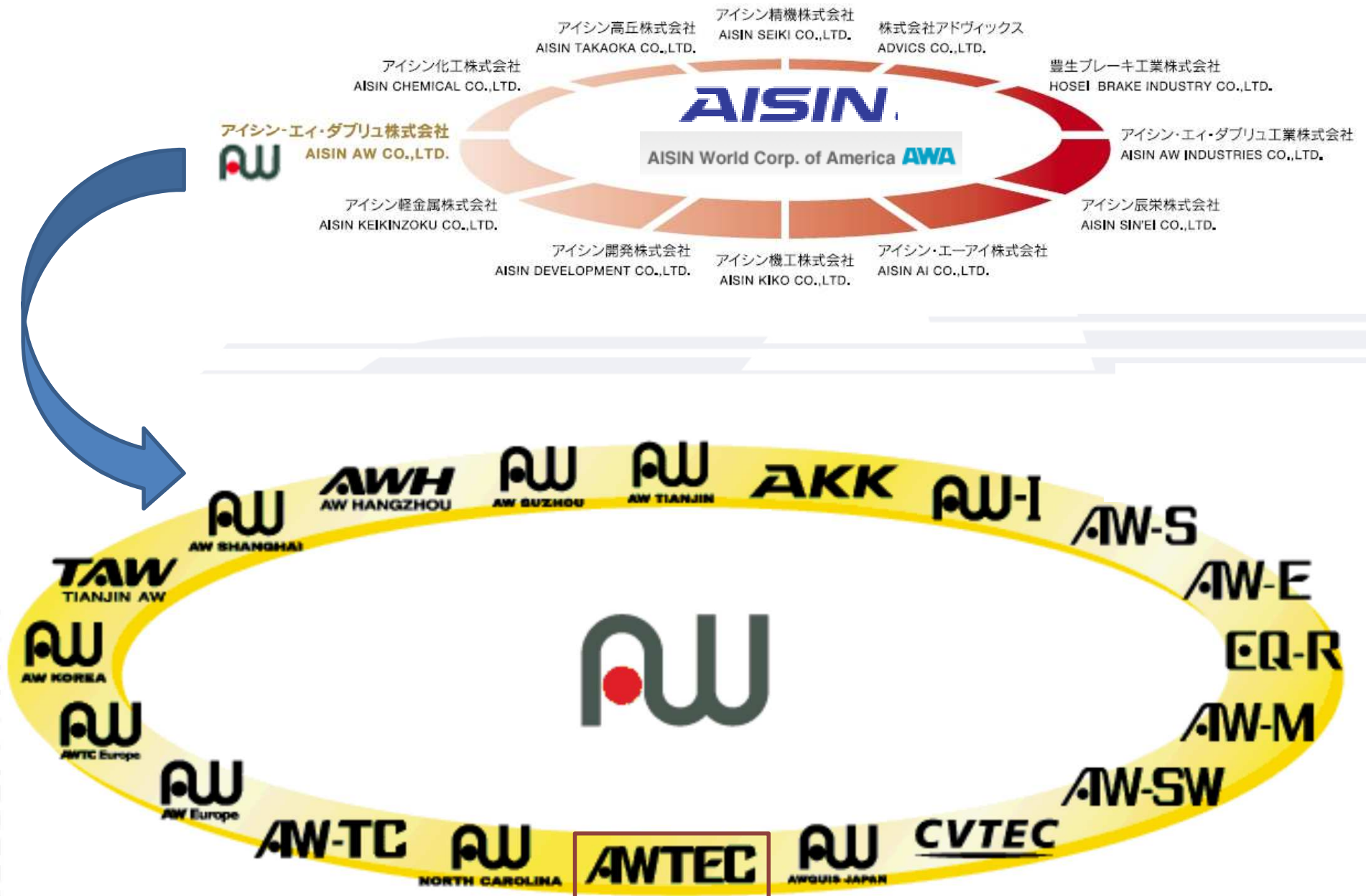
**Clean Corporate Citizen  
Workshop**

**October, 2013**



***...Remanufacturing a Better Environment!***

# Aisin Group Relationship



# REMAN PRODUCTS

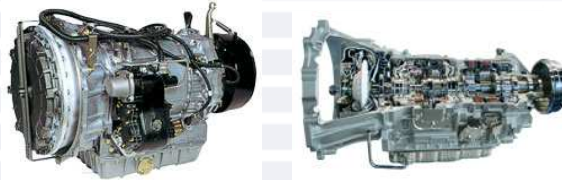
Reman Complexity		
Models	Assemblies	Components
<b>78</b>	<b>502</b>	<b>11,626</b>

## Front Wheel Drive



Speed	Customer	Model	Photo
6	Volvo, Hyundai, Mazda, Ford	TF-80 TF-60	
5	Toyota	U150	
5	Volvo, Saab	55-50 50-42	
4	Toyota	U140	
4	Toyota, Suzuki	U340	

## Medium Duty



















## Rear Wheel Drive



Speed	Customer	Model	Photo
8	Lexus	AA80	
6	Toyota	B800	
6	Toyota, Lexus, Hyundai	TB-60	
6	Toyota, Lexus, Hyundai	TB-81	
5	Toyota, Lexus	A750	
4	Toyota	A340	
4	Toyota, Hyundai	A43	
4	Suzuki	TB-50	
4	Toyota, Hyundai, Isuzu	A340	
4	GM, Suzuki	72-41	

# REMAN CUSTOMERS

1989	1995	1999	2000	2001	2004
 <b>TOYOTA</b>	 	 <b>FUSO</b> <b>ISUZU</b>	 <b>mazda</b>	 <b>SUZUKI</b>	
2005	2006	2007	2008	2011	2012
  <b>HINO</b>		 		 	 <b>SUBARU</b>

DRIVETRAIN



**AWTEC**  
 AW TRANSMISSION ENGINEERING USA, Inc.



# AWTEC FACILITIES



## Keel Street East

- Office Space: 14,000 ft<sup>2</sup>
- Manufacturing Space: 61,500 ft<sup>2</sup>
- Manufacturing Lines: 6



## Keel Street West

- Office Space: 19,800 ft<sup>2</sup>
- Manufacturing Space: 86,500 ft<sup>2</sup>
- Manufacturing Lines: 1



## Cleat Machine Shop

- Office Space: 1,000 ft<sup>2</sup>
- Tooling Center Space: 10,000 ft<sup>2</sup>

DRIVETRAIN



**AWTEC**  
AW TRANSMISSION ENGINEERING USA, Inc.

# Cleat Street Machine Shop

## Sun Gear Bushing Rework Process

**Began:**



**New Process:**

**Savings: \$78,000 annually**





# Cleat Street Machine Shop-

Savings: \$163,000 annually



***...Remanufacturing a Better Environment!***

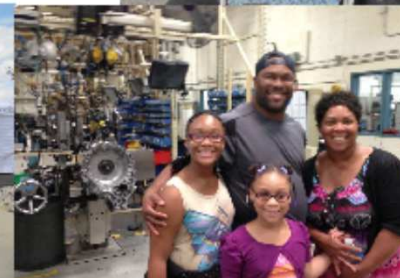
# Cleat Street-VIT

## SD Card Production



***...Remanufacturing a Better Environment!***







**ISO-14001 10 YEAR  
ANNIVERSARY  
2003-2013**

# ACCOMPLISHMENTS:



***...Remanufacturing a Better Environment!***





## AWTEC Mission Statement

AWTEC is devoted to supporting AISIN AW's customers and products. In this effort, we continually develop and improve our processes to exceed customers' expectations.

## AWTEC Certifications & Awards



**ISO 14001**

**Q1**



**ISO/TS 16949**

# TOYOTA QUALITY ALLIANCE

2008



2009



2010



2011



2012



**Five consecutive  
years**



**2013 Goal  
Platinum**



**AWTEC**  
AW TRANSMISSION ENGINEERING USA, Inc.

# C3 Award Ceremony



•AWTEC  
Team

•MDEQ  
Officials

•Plymouth  
Township  
Supervisor

•Local News  
Article in  
Plymouth  
Observer





## *Certificate of Recognition*



# CLEAN CORPORATE CITIZEN PROGRAM

This certifies that

AW Transmission Engineering USA, Inc.

is hereby designated a

**Clean Corporate Citizen**

for exemplary environmental performance and stewardship.

January 23, 2013

Date

A blue ink signature of Rick Snyder, Governor of Michigan.

Rick Snyder, Governor  
State of Michigan



A blue ink signature of Dan Wyant, Director of the Michigan Department of Environmental Quality.

Dan Wyant, Director  
Michigan Department of Environmental Quality

***AW TECHNICAL CENTER U.S.A., INC.***  
**7-31-2013 Passed ISO-14001 Pre-Certification Audit**  
**9-5-2013-Passed Certification**





## Community Involvement: Green Street Fair Discontinued





## **AWTEC exhibits for 4<sup>th</sup> year at Plymouth Green Street Fair**

**On May 4<sup>th</sup>, 5<sup>th</sup> & 6<sup>th</sup>, 2012, AWTEC hosted an exhibit to prove our “green” efforts at the Plymouth Green Street Fair. This was the 4<sup>th</sup> year in a row participating in this event. The Green Street Fair helps educate and inform people about the benefits of green, organic and eco-friendly products and services. An estimated 90,000 people attended the 3 day event with over 200 community groups and partnering organizations from all over Michigan exhibiting.**

**This year we featured three component part remanufacturing projects. These included the Sun Gear Bushing, YL housing bearing bore and the oil pump stator shaft bushing rework projects. We displayed the actual parts before and after rework or “remanufacture”. We also gave statistics on production quantities for each component and the positive effect on the environment. Remanufacturing allows for a reduction of our carbon footprint. Another advantage is it saves metal from being re-harvested and manufactured again. This greatly reduces greenhouse gas.**

**The fuel efficient Scion iQ car was displayed with its transmission, a display model Continuous Variable Transmission. This was a big hit, thousands of visitors asked questions about the CVT’s functionality and the car itself.**

**AWTEC employees volunteer at the booth and show their commitment to the company, and also to being GREEN. Team Members are able to talk about what they do and where they work with a sense of pride!**

**Chrysan Industries and Nippon Oil also provided support material on the CVT functionality and donated gifts for visitors.**

**AWTEC is ISO-14001 certified, a Michigan Pollution Prevention Partner and a 2013 Clean Corporate Citizen Award recipient!**



## AWTEC sponsors 4<sup>th</sup> annual E-waste Day for the Metro-West Industrial Park

In April, AWTEC held its fourth annual E-waste event at its facility. All associates, along with their friends and families were given the opportunity to donate as much e-waste as they could carry to the collection. The event was posted internally and flyers were distributed by going door to door to neighboring businesses in the park. This allowed us the chance to become acquainted with neighbors and discuss future possibilities for consolidating recycling, services and other environmental friendly practices in the future. AWTEC volunteers waited to assist with unloading donated items.

Others companies that participated include National Steel Corp, AT & L Corp., Statewide Recycling and Chrysan Industries.

Proceeds were donated to benefit the Children's center at Beaumont Hospital.

Here is an example of our flyer:





# Donate Your E-Waste!

Join us in celebrating Earth Day 2013

When: April 22<sup>nd</sup>, 23<sup>rd</sup> & 24<sup>th</sup>  
3:30 – 4:00 PM



Where: Cleat Street

Why: Proceeds to benefit  
Beaumont Children's  
Hospital.

## What Type of E-Waste Can Be Donated



- Computers and computer components
- Unbroken computer monitors
- Projectors and audio visual equipment
- Power cables and toner cartridges
- VCR's and DVD Players
- Printer, copiers and fax machines
- Cameras, phones and other wireless devices
- Stereos, speakers and video game systems





## AWTEC sponsors Friends of the Rouge River

AWTEC has long been active in the functions of the Rouge River Group, beginning several years ago with the Johnson Creek Protection Group. In recent years, this group was later consolidated with Friends of the Rouge (FOTR).

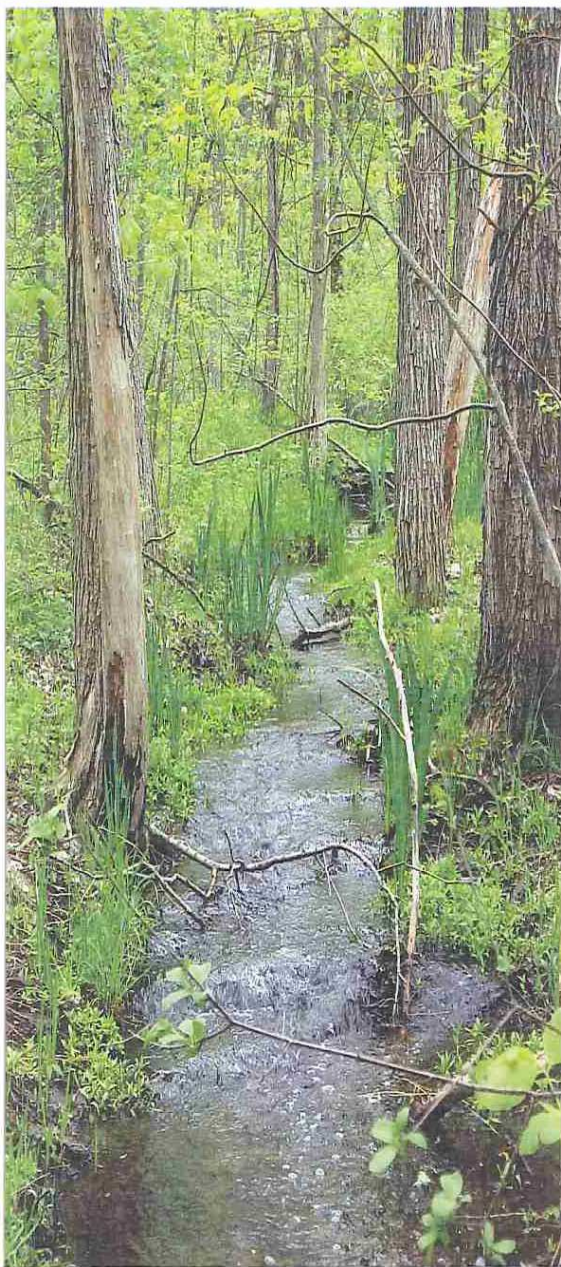
Several AWTEC team members participate in the clean up and bug hunts. Matt Tykoski, Environmental Technician at AWTEC is a Team Leader for the bug hunts and was out there studying the health of river life on April 27<sup>th</sup>, 2013. This was not the first bug hunt for Matt who was chosen by the organization to train for the team leader position.

Dave Timmerman, of the Inspection department has done many river clean ups and even donations the use of his equipment. He sometimes takes a leisure canoe trip down the river on his own time to soak in the peace and beauty it provides.

In honor of Earth Day 2013, AWTEC received a Certificate of Appreciation for contributing to the FOTR organization. We plan to increase awareness among our team and continue our support long into the future.







# *Certificate of Appreciation*

This certificate is awarded to  
**AWTEC USA**

in recognition of valuable contributions to Friends of the Rouge

**Friends  
of  
the ROUGE**

*Evelyn Cassidy*  
\_\_\_\_\_  
*Signature*

*4/17/13*  
\_\_\_\_\_  
*Date*

Friends of the Rouge is a non-profit 501(c)(3) organization created in 1986 to raise awareness about the need to clean up the Rouge River in southeast Michigan.

# Community Involvement: AWARD!

Presented to



September 19<sup>th</sup>

State Capitol  
Building in  
Lansing



2013

## NEIGHBORHOOD ENVIRONMENTAL PARTNERS PROGRAM

*Fact Sheet*

### Introduction

The Neighborhood Environmental Partners (NEP) Program is a competitive environmental awards initiative created by the Department of Environmental Quality (DEQ) to encourage and reward businesses and their neighbors who work together locally on projects. These projects improve environmental awareness and the quality of life in their communities. The NEP Program also provides an avenue for business and community groups to share social and environmental responsibility goals in their community.

### How it Works

Businesses and neighborhood groups can participate by developing an environmental mission statement and completing "Neighborhood Partner" activities. Activity categories include: environmental improvements, environmental education, and environmental mentoring. Participants then apply for an NEP Award. The NEP Program is currently only open to facilities designated as DEQ Clean Corporate Citizens, Pollution Prevention Partners *(see list of eligible Pollution Prevention Partners)*, and their surrounding communities.

Applications for an NEP Award will be separated into two categories, small- to medium-size business applications (businesses with fewer than 500 employees) and large business applications (businesses with greater than 500 employees). The best projects from each category will be selected to receive an NEP Award. Applicants must be in good standing and compliant with all applicable environmental regulations in order to qualify for an NEP Award. In addition to those receiving NEP Awards, there will be honorable mentions for those facilities that have made notable environmental accomplishments.

*\*Eligible Pollution Prevention Partners:* Clean Marinas; Michigan Great Printers Project; Michigan Business Pollution Prevention Partnership; Pulp, Paper & Products Pollution Prevention; Michigan Turfgrass Environmental Stewardship Program; and U.S. Department of Defense/State of Michigan Pollution Prevention Alliance.

### Awards Schedule



Activities completed within 2012 are eligible for an NEP Award.

➤ Applications will be accepted March 20, 2013 through May 15, 2013.

➤ DEQ award announcements will be made in July 2013.

MICHIGAN DEPARTMENT OF  
ENVIRONMENTAL QUALITY  
OFFICE OF ENVIRONMENTAL ASSISTANCE  
PO BOX 30457  
LANSING MI 48909-7957  
[www.michigan.gov/deq](http://www.michigan.gov/deq)  
Environmental Assistance Center  
800-662-9278  
March 2013 • #9858



# NEP - Award1<sup>st</sup> Time



**Thank You!**  
**Any Questions?**



***...Remanufacturing a Better Environment!***